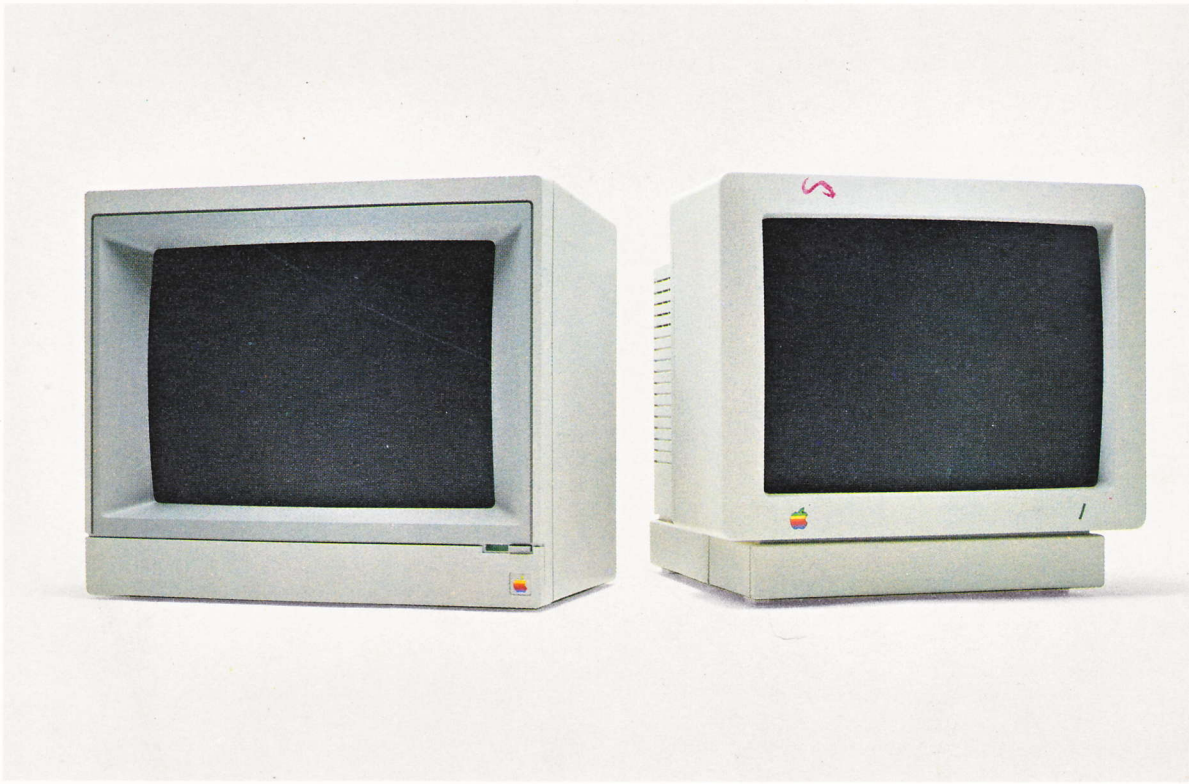
Apple® II

AppleColor™ Composite Monitor Owner's Guide



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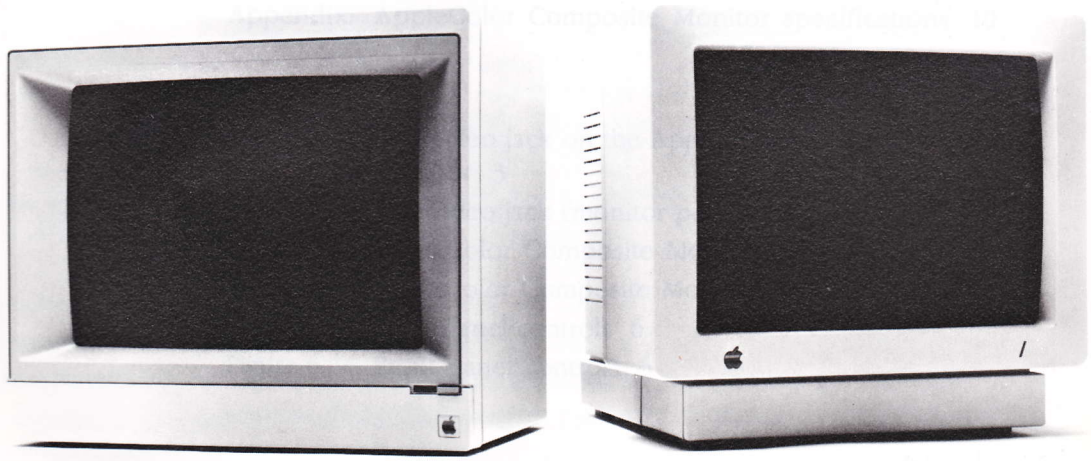
WARNING

This equipment has been certified to comply with the limits for a Class B computing device, pursuant to Subpart J of Part 15 of FCC Rules. See instructions if interference to radio or television reception is suspected.

Apple® AppleColor™ Composite Monitor Owner's Guide



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(408) 996-1010

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Radio and television interference

The equipment described in this manual generates and uses radio-frequency energy. If it is not installed and used properly—that is, in strict accordance with Apple's instructions—it may cause interference with radio and television reception.

This equipment has been tested and complies with the limits for a Class B computing device in accordance with the specifications in Subpart J, Part 15, of FCC rules. These rules are designed to provide reasonable protection against such interference in a residential installation. However, there is no guarantee that the interference will not occur in a particular installation, especially if a "rabbit-ear" television antenna is used. (A rabbit-ear antenna is the telescoping-rod type usually found on television receivers.)

You can determine whether your computer is causing interference by turning it off. If the interference stops, it was probably caused by the computer or its peripheral devices. To further isolate the problem, disconnect the peripheral devices and their input/output (I/O) cables one at a time. If the interference stops, it was caused by either the peripheral device or the I/O cable. These devices usually require shielded I/O cables. For Apple peripheral devices, you can obtain the proper **shielded cable** from your authorized Apple dealer. For non-Apple peripheral devices, contact the manufacturer or dealer for assistance.

A **shielded cable** uses a metallic wrap around the wires to reduce the potential effects of radio-frequency interference.

Important This product was FCC-certified under test conditions that included use of shielded cables and connectors between system components. It is important that you use shielded cables and connectors to reduce the possibility of causing interference to radio, television, and other electronic devices.

If your computer does cause interference to radio or television reception, you can try to correct the interference by using one or more of the following measures:

- Turn the television or radio antenna until the interference stops.
- Move the computer to one side or the other of the television or radio.
- Move the computer farther away from the television or radio.
- Plug the computer into an outlet that is on a different circuit than the television or radio. (That is, make certain the computer and the radio or television set are on circuits controlled by different circuit breakers or fuses.)
- Consider installing a rooftop television antenna with a coaxial cable lead-in between the antenna and television.

If necessary, consult your authorized Apple dealer or an experienced radio/television technician for additional suggestions.

Apple®

AppleColor™ Composite Monitor Owner's Guide

The AppleColor™ Composite Monitor and the AppleColor Composite Monitor IIe are the ideal companions for Apple computers in both design and functionality. You will find either monitor easy to set up and operate. Both monitors feature

- Attractive styling to match your Apple computer
- Your choice of white-only text or color graphics display
- Text display in either 40-column or 80-column widths
- Simultaneous display of color graphics and 40-column text
- High-contrast screen
- Easy-to-clean screen and cabinet

This guide describes how to set up and use the AppleColor Composite Monitor and the AppleColor Composite Monitor IIe. To get the best results from your monitor, just follow the step-by-step instructions below as they pertain to your model.

Getting started

Here is the order of activities for setting up your monitor. The sections that follow explain each step in detail.

1. Connect the monitor to your computer and to a power outlet.
2. Turn the monitor on.
3. Adjust the monitor display for text and color.

The last part of this guide gives you tips on care and use of the monitor.

Before you begin, make sure that the computer is turned off and that you have

- Your color monitor
- The video cable
- The monitor power cord (separate on 220/240-volt models only)

When considering where to put your Apple system, keep in mind that the monitor requires its own electrical outlet. This means that you need at least two electrical outlets near your system—three if you add a printer or other device.

Many people prefer to plug their computer equipment into a special power strip equipped with protection against surges in electrical current. See your authorized Apple dealer for information about power strips.

Warning This equipment is intended to be electrically grounded. This product is equipped with a three-wire grounding plug—a plug with a third (grounding) pin. This plug will fit only a grounding-type AC outlet. This is a safety feature. If you are unable to insert the plug into the outlet, contact a licensed electrician to replace the outlet with a properly grounded outlet.

Do not defeat the purpose of the grounding plug!

Connecting the monitor to your computer

This section shows you how to connect the monitor to the computer and to a power source. If you haven't already done so, remove the monitor from its carton—reach *under* the monitor with both hands and lift upward. For the moment, put the monitor on a work area where you can easily get at its back side. Then follow these steps:

1. Remove all packing materials from the monitor and return them to the carton.

❖ *By the way:* Save your shipping carton and packing materials in case you need to store or ship your monitor.

2. Plug one end of the video cable into the video jack on the back of your monitor. (See Figure 1.) Both ends of the video cable are the same, so it doesn't matter which end you connect.

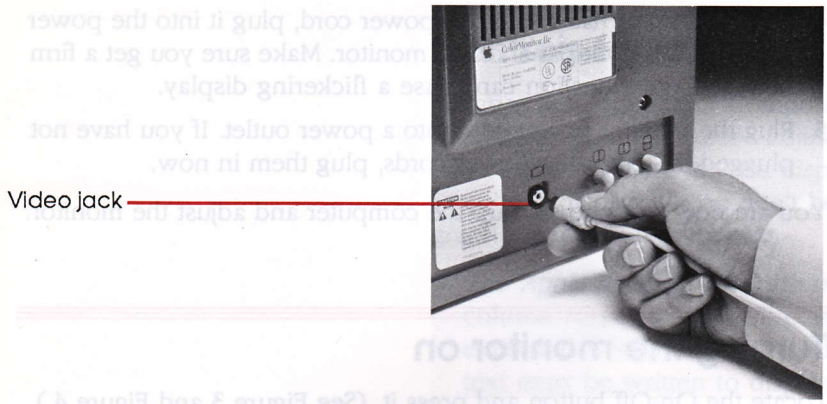


Figure 1
The video jack on the AppleColor Composite Monitor

3. Plug the other end of the cable into the computer's video jack. (See Figure 2.)

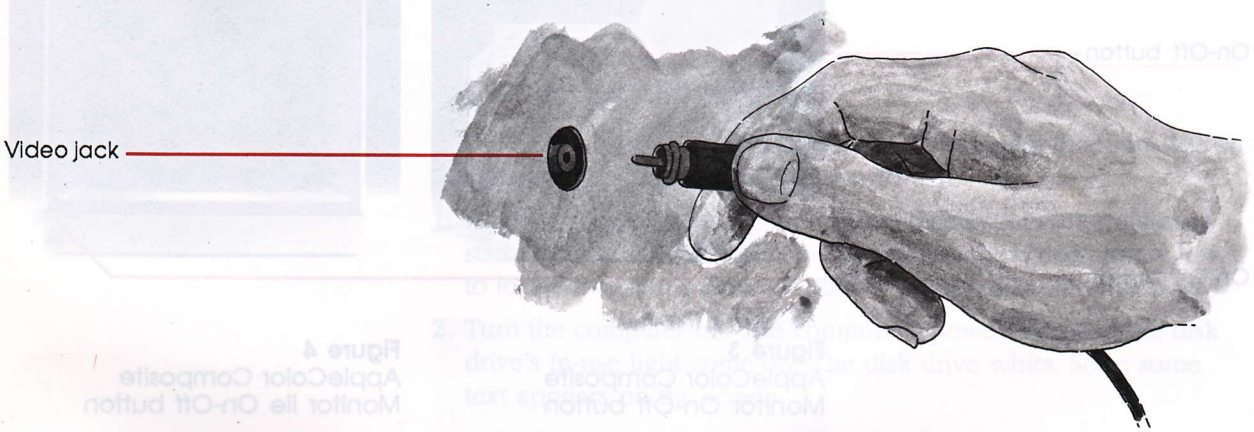


Figure 2
The video jack (monitor port) on the computer

❖ *About your cables:* Apple computers and all Apple devices come with shielded cables. If you use other devices with your Apple computer, make sure the cables are shielded. See the section "Radio and Television Interference" for more information.

4. If your monitor has a separate power cord, plug it into the power socket in the back panel of the monitor. Make sure you get a firm fit. A loose connection can cause a flickering display.
5. Plug the monitor power cord into a power outlet. If you have not plugged in your other power cords, plug them in now.

You are now ready to start up the computer and adjust the monitor.

Turning the monitor on

Locate the On-Off button and press it. (See Figure 3 and Figure 4.) The green power indicator light should light up in the lower-right corner of the monitor. If it does not turn on, press the button again.

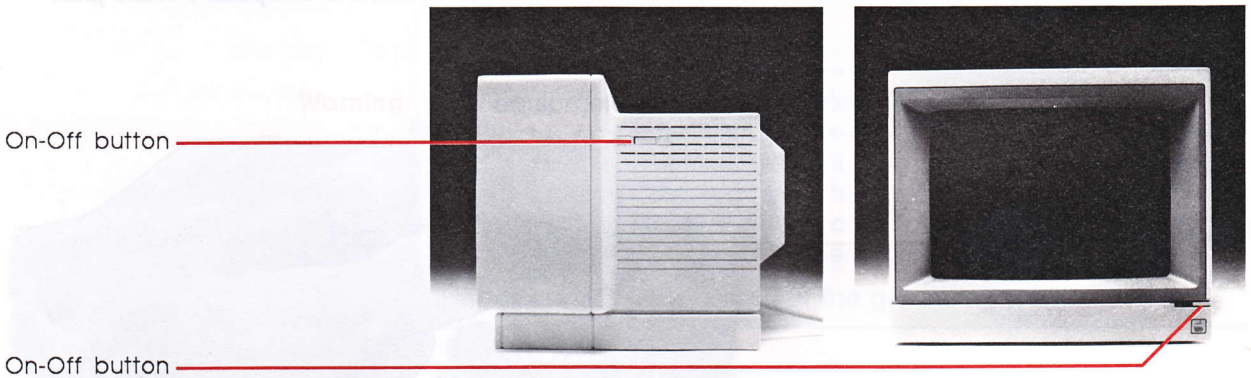


Figure 3
AppleColor Composite Monitor On-Off button

Figure 4
AppleColor Composite Monitor IIe On-Off button

❖ *Note:* If the power indicator light still does not come on, check to see if the power cable is properly plugged in at both ends. If it is, find out if the power to the wall socket or power strip has been interrupted. (You can test the outlet by plugging something else into it—like a desk lamp or a radio. If the test appliance works and the monitor does not, consult your authorized Apple dealer.)

Controls for adjusting the monitor

Because the AppleColor Composite Monitor has two modes of operation—text and color—adjusting the monitor's picture takes two stages: adjusting the text display and then adjusting the color (graphics) display. If you don't have a program that displays color graphics, adjust only for text.

- *The Apple IIe and 80-Column Display:* To display text in 80-column form, an Apple IIe must have an 80-column card or extended 80-column card. Also, the program displaying the text must be written to display 80 columns. The monitor alone can't change a 40-column program into an 80-column display.

If you also intend to adjust the display for color, you need a program that displays a color graphic. It doesn't matter whether this is a test pattern, a business graph, or a game, as long as it gives you some steady pattern of colors to work with. The more colors, the better!

Adjusting for text display

To work through this section, you'll need a program that puts text on the screen (preferably in 80-column format).

1. Insert the disk you've chosen for text display into your system's startup disk drive. (See your owner's guide if you don't know how to locate the startup drive or how to insert a disk into the drive.)
2. Turn the computer on. The computer's power light and the disk drive's in-use light come on. The disk drive whirs. Soon some text appears on the screen.

Three controls—Vertical Hold, Vertical Size, and Horizontal Hold—are on the back panel of the monitor. An icon identifies each control. (See Figure 5.)

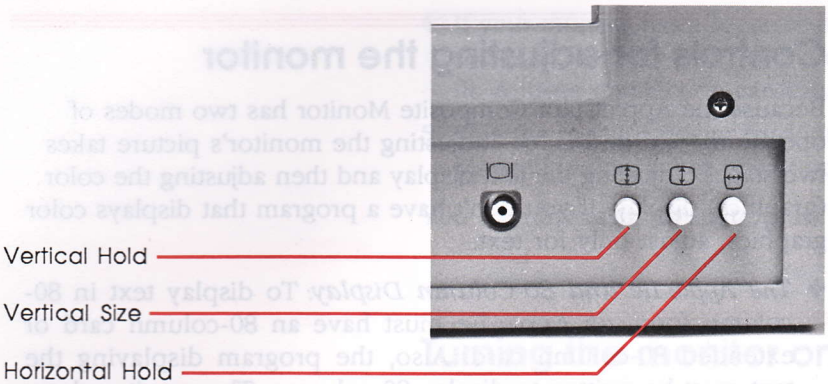


Figure 5
Back panel controls

3. If the display is moving vertically, turn the Vertical Hold control until the display becomes stable.
4. If the display is moving horizontally, turn the Horizontal Hold control until the display becomes stable.
5. If the display looks stretched so that characters on the top and bottom lines are partially lost, or if the characters look squashed, turn the Vertical Size control until you have lengthened or shortened the display to the desired degree.

To reach the monitor's front panel controls, open the door on the lower portion of the front panel. (The door clicks open and shut.) Figure 6 shows the position of each front panel control.

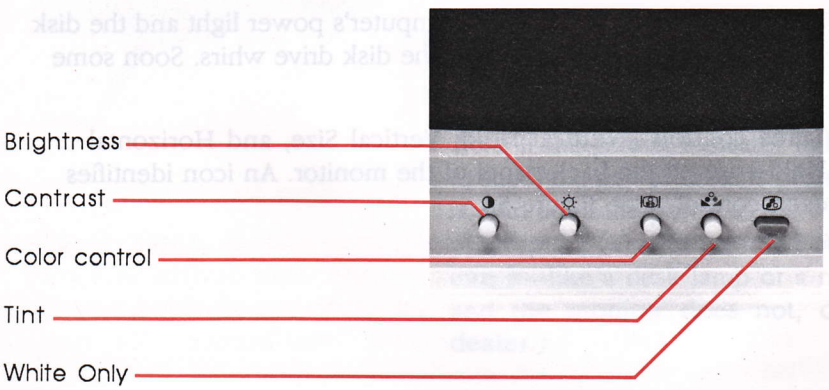


Figure 6
Front panel controls

6. To achieve a comfortable level of screen brightness, turn the Brightness control.
7. Rotate the Contrast control to achieve a comfortable balance between characters and screen background.

❖ *By the way:* The White Only button has no effect on the text display. Text always appears in white.

If you do not intend to work with color graphics right away, close the front panel door and skip to "Suggestions for Care and Use." You can always adjust the color at a later time.

Adjusting for color graphics

Once brightness and contrast are set for text, and the display is in stable form, you are ready to adjust the monitor for color graphics. The color adjustment controls are on the front panel.

1. Start up a color graphics program and display a graphic sample on the screen.
2. If the display appears in white, the White Only button is on. Press it to change to color display. The White Only button always overrides the color display, so when you select white-only mode, graphics are displayed in white.
3. Turn the Color control clockwise to intensify color. Try for a balance between pale and vivid colors.
4. Turn the Tint control to create the shades of color you desire. You may have to go back and forth between adjusting color and tint to get a good balance. Depending on your environment and viewing needs, you might also need to readjust brightness and contrast for color, too.

❖ *By the way:* The Tint control on the 220/240-volt AppleColor Composite Monitor IIe has no effect on the display.

❖ *Note:* If the monitor does not respond properly to the controls, contact your authorized Apple dealer.

Close the control panel door. Your AppleColor Composite Monitor is ready for work. But before you begin working, take a moment to read about the proper care of your Apple computer system.

Suggestions for care and use

This section gives you some guidelines for using your AppleColor Composite Monitor or AppleColor Composite Monitor IIe and for keeping it in good working order.

Working with the monitor

Position the computer and monitor as you prefer for your work. Some models of Apple computers are large enough for you to place the AppleColor Composite Monitor directly on top of the computer's case. Try it and see if you like it there. If not, you can place the monitor to the side.

❖ *Note:* An active monitor generates signals that can interfere with a disk drive's ability to read a disk. If your system seems to have trouble reading disks, move the disk drive(s) away from the monitor.

You'll probably want to use white-only display for text programs, such as word processing, and reserve color for graphics programs. If you choose color mode while text is on the screen, the text will be white. If you display a graphic while in white-only mode, the graphic will be white. Some software mixes color graphics and text in a single display. If the text in such a display contains color splotches, white-only mode will make the text easier to read.

To keep your eyes from tiring, avoid staring into the monitor for long periods of time without a break. Focus on a distant object from time to time.

Things to avoid

Your computer system needs a good working environment just as you do. Keep these computer health tips in mind.

- Don't leave your Apple system exposed to direct sunlight. The heat can damage the case and even the electronics.
- Don't put cups, glasses, or any vessel containing liquids on or beside the computer, monitor, or peripheral devices. Spilling a liquid into any electronic instrument can damage circuitry.

- Don't leave the monitor on after you turn off the computer.
- Don't block the vents on the monitor. These vents prevent the monitor from overheating while in use.

Cleaning the monitor

Follow these suggestions if you need to clean your monitor:

- Clean the cabinet with a *damp* (not wet) lint-free cloth.
- Don't apply aerosol sprays, solvents, or abrasives that might damage the cabinet finish.
- If the screen gets dirty, apply a household glass cleaner to a clean cloth or paper towel and wipe the screen. Do not spray glass cleaner directly onto the screen. It could run down inside the case and damage electrical circuits.

Service and support

To help you get the best performance from your system, Apple Computer, Inc. has established a worldwide network of full-support authorized Apple dealers. If you need answers to technical questions or information about product updates, your authorized Apple dealer can help you. Apple's Technical Support organization backs each dealer and international technical support group via AppleLink™, a state-of-the-art on-line electronic information service, to ensure prompt, reliable assistance.

Your dealer has the latest information on new hardware and software products as well as product updates. If you wish to upgrade your system, your dealer can help you select compatible components.

If your product requires service, your local authorized Apple dealer is trained and ready to support you. Apple provides factory-quality parts and the latest available diagnostic equipment to the more than three thousand authorized Apple service centers throughout the world. Apple guarantees parts and warranty labor. (Regulations in each country determine the length of warranty. Some restrictions may apply, depending on the country of original purchase.)

If for some reason you cannot return to the authorized dealer from whom you purchased your system, go to the nearest service location. For the location nearest you, in the United States, call (800) 538-9696; in Canada, call (800) 268-7796 or (800) 268-7637. For locations in other countries, either call the Apple headquarters in your country or write to

Apple Computer, Inc.
Attn: Customer Relations
20525 Mariani Avenue
Cupertino, CA 95014
USA

Apple also offers service options designed to meet your needs. They range from carry-in contracts like the Apple*Care*® Service Agreement (U.S., Canada, and Australia only), which extends full warranty coverage up to three years, to self-service plans designed to allow large installations to repair their own equipment. Whether you use your computer at home, in the office, or at school, Apple has a low-cost service plan for you. For details, please visit your authorized Apple dealer.

Appendix: AppleColor Composite Monitor specifications

The following specifications apply to both the AppleColor Composite Monitor and the AppleColor Composite Monitor IIe.

Picture tube	14-inch diagonal (13-inch view) 0.52 mm slot pitch High contrast (black matrix)
Input signal	Composite-only sync negative 1.0 ± .5 volts peak to peak, internally terminated with 75 ohm resistor
User controls	Power switch Contrast Brightness Color Tint White Only button Vertical Size (back) Vertical Hold (back) Horizontal Hold (back)

Scanning frequencies

	NTSC/60	NTSC/50–PAL/50
Horizontal	15.734 kHz	15.659 kHz
Vertical	60 Hz	50 Hz

Color reference frequency

NTSC/60 Hz	NTSC/50 Hz	PAL/50 Hz
3.579545 MHz	3.562456 MHz	4.433618Mz

Video bandwidth

	NTSC	PAL
Text (Monochrome)	8.0 MHz	8.0 MHz
Graphics (Color)	3.0 MHz	3.8 MHz

Weight 12.5 kg (27.56 lb) maximum

Power requirement 50 watts under normal viewing conditions; 75 watts maximum.

Input voltage

Model	Operating range	Power frequency
120 v	108–132	50–60 Hz
220 v	198–242	50–60 Hz
240 v	216–264	50–60 Hz

Note: Input voltage is not adjustable within the monitor.

Operating ambient temperature 0°C to 50°C (32°F to 122°F)

Fuse protection The monitor contains internal power line fuse protection. This fuse should be replaced with the same type by a qualified service technician.

This Apple manual was written, edited, and composed on a desktop publishing system using the Apple Macintosh™ Plus and Microsoft® Word. Proof and final pages were created on the Apple LaserWriter™ Plus. POSTSCRIPT™, the LaserWriter's page-description language, was developed by Adobe Systems Incorporated.

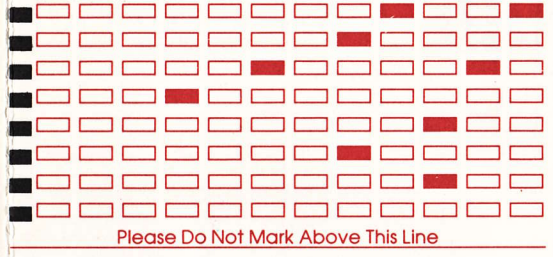
Text type is ITC Garamond® (a downloadable font distributed by Adobe Systems). Display type is ITC Avant Garde Gothic®. Bullets are ITC Zapf Dingbats®. Program listings are set in Apple Courier, a monospaced font.

Tell Apple About Your AppleColor™ Composite Monitor

- Please contact your authorized Apple dealer when you have questions about your Apple products. Dealers are trained by Apple Computer and are given the resources to handle service and support for all Apple products. If you need the name of an authorized Apple dealer in your area, call toll-free: 800-538-9696.

- Would you like to tell Apple what you think about this product? After you have had an opportunity to use this product, we would like to hear from you. You can help us to improve our products by responding to the questionnaire below and marking the appropriate boxes on the card at the right with a **#2 lead pencil**. If you have more than one response to a question, mark all the boxes that apply. Please detach the card and mail it to Apple. Include additional pages of comments if you wish.

1. Which composite monitor did you purchase? (**1**=AppleColor Composite Monitor, **2**=AppleColor Composite Monitor IIe)
2. How would you rate the monitor overall? (**1**=poor . . . **6**=excellent)
3. Where did you purchase your monitor? (**1**=dealer, **2**=Corporate Buy, **3**=Teacher Buy, **4**=department store, **5**=other)
4. Did you purchase your monitor and your computer at the same time? (**1**=no, **2**=yes)
5. Which computer are you using with your monitor? (**1**=Apple IIGS, **2**=Apple II, **3**=Apple II Plus, **4**=Apple IIe, **5**=Apple IIc, **6**=Apple III, **7**=other)
6. Was color software availability a factor in your purchase of the monitor? (**1**=no, **2**=yes)
7. How easy was your monitor to set up? (**1**=difficult . . . **6**=very easy)
8. How easy was it to adjust the display on your monitor? (**1**=difficult . . . **6**=very easy)
9. Did you use the *AppleColor Composite Monitor Owner's Guide* to help you set up? (**1**=no, **2**=yes)
10. Did you use the *AppleColor Composite Monitor Owner's Guide* to help you adjust the display? (**1**=no, **2**=yes)
11. How would you rate your satisfaction with the *AppleColor Composite Monitor Owner's Guide?* (**1**=low . . . **6**=high)
12. How easy was the *AppleColor Composite Monitor Owner's Guide* to read and understand? (**1**=difficult . . . **6**=very easy)
13. Please describe any errors or inconsistencies you may have encountered with the materials. (Page numbers would be helpful.)
14. What suggestions do you have for improving the monitor?



Thanks for your time and effort.

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Apple Computer, Inc.
20525 Mariani Avenue
Cupertino, CA 95014
408 996-1010
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